

In the Claims:

1. (Currently Amended) A method of stimulating the growth of lung alveolar surface in a lung ~~in need thereof~~, comprising:

providing alveolar epithelial progenitor ~~or stem~~ cells capable of regenerating lung alveolar surface; and

administering said alveolar epithelial progenitor ~~or stem~~ cells to said lung in an amount sufficient to stimulate the growth of lung alveolar surface therein, wherein said alveolar epithelial progenitor cells are from the same species as said lung.

2. (Cancelled).

3. (Currently Amended) A The method according to claim 1, wherein said lung is *ex vivo*, and wherein said administering step is followed by the step of:

transplanting said lung into a recipient in need thereof.

4. (Currently Amended) A The method according to claim 1, wherein said ~~subject~~ lung is a mammalian ~~subject~~ lung.

5. (Currently Amended) A The method according to claim 1, wherein said ~~subject~~ lung is a human ~~subject~~ lung.

6. (Cancelled).

7. (Currently Amended) A The method according to claim 1, wherein said alveolar epithelial progenitor cells are autologous cells.

8. (Cancelled).

9. (Currently Amended) A The method according to claim 1, wherein said ~~stem or~~ alveolar epithelial progenitor cells are lung cells.

10. (Currently Amended) A The method according to claim 1, wherein said ~~stem or~~
alveolar epithelial progenitor cells are bone marrow cells.

11. (Cancelled).

12. (Cancelled).

13. (New) An *ex vivo* method of stimulating the growth of lung alveolar surface in a lung, comprising:

providing alveolar epithelial progenitor cells capable of regenerating lung alveolar surface; and

administering said alveolar epithelial progenitor cells to said lung *ex vivo* in an amount sufficient to stimulate the growth of lung alveolar surface therein.